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ABSTRACT

The handbook provides general information about the resource program for learning disabled (LD) students at the secondary level in Augusta County, Virginia. Noted in the section on program philosophy is the intention to provide academic skills and coping strategies through a unified combination of remedial and compensatory teaching. The section on needs of the LD adolescent population includes a list of 21 minor program modifications possible in the regular classroom. Criteria for special services are detailed in the section on program eligibility. Briefly noted is the flexible period of enrollment in the resource program. Described in the section on personnel roles are the roles of the learning disabilities resource teacher, the regular classroom teacher, the guidance counselor, and the principal. The curriculum (stressing language arts, mathemateics, and survival skills) and appropriate instructional materials are briefly considered. Principles of both student evaluation and program evaluation are mentioned. The final section notes the role of the local special education advisory committee. Appended are detailed curriculum objectives and a list of suggested instructional materials. (DB)

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BASIC SKILLS - LEARNING DISABILITIES

A Secondary Learning Disabilities Resource Program

Handbook for Teachers

by

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Augusta County Public Schools

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I. Philosophy

For the past four years Augusta County Schools have provided resource services to learning disabled children in the elementary schools. Beginning with the 1978-79 school year these services will be extended to the high schools.

The secondary learning disabilities program must be predicted on three things: the learning characteristics of the LD student, what he needs to be able to complete high school successfully, and what he needs to function independently as an adult.

Let us then lock at the LD adolescent. This is a student of average or above intelligence who for many reasons has not achieved academically up to his potential. He may or may not have received learning disabilities services at the elementary level and while some of his problems may have been ameliorated or he has learned compensatory techniques, he is not experiencing success in high school. After years of academic failure and frustration, he has a poor self-concept and probably poor motivation. He may also have a short attention span, may be disorganized in his approach to studying and assignments and may present a pattern of disruptive behavior in class. Unlike a child of low intelligence, he is very much aware of his shortcomings which increases his frustrations. Added to this is the turmoil of adolescence that all students this age are experiencing, with which he is even less prepared to cope.

The goal of the secondary program must be to provide the LD student with specialized support help which will allow him to function adequately within the regular high school curriculum without removing him from his peer group or unnecessarily stigmatizing him. Therfore, the resource model appears to be most appropriate. In this delivery system

the student will be scheduled into the resource room for certain periods of time based on his needs as determined in his individualized educational plan.

This does not mean the LD resource program will provide tutorial help in specific content areas. It is unrealistic to expect that the teacher with LD training will merely provide assistance with the solution of an algebraic equation or the conjugation of a Spanish verb. Instead the LD teacher's strength lies in teaching basic skills which are prerequisite to success in general curricular areas. The secondary LD program will be a two-pronged approach emphasizing remediation of deficit skill areas (particularly language arts and mathematics) and teaching compensatory skills to facilitate adequate functioning in the mainstream. Thus, while increasing reading comprehension or computational skills, study habits, and test taking techniques which will improve efficiency will also be addressed. The types of compensatory skills taught will be determined by whether the student is college-bound or career-bound after graduation.

As the adolescent LD differs from the elementary student, so must the secondary program be differentiated from the elementary orientation. Long-range career goals of college entrance or job entry skills dictate the use of relevant, practical instructional materials such as those developed for career awareness and pre-vocational programs. Teaching basic skills through the use of these high interest materials appears more appropriate for the secondary level.

While the primary emphasis of the LD resource program is academic, the importance of affective education cannot be overlooked. Providing

success experiences for the student who has previously met with failure and helping him to realize that he can achieve is another important goal.

In essence, then, a secondary level program for the learning disabled should focus on providing the student with both basic academic skills and coping strategies so that at the time of graduation he may enter post-secondary education or the job market. This may best be done through a unified combination of remedial and compensatory teaching.

II. Needs of the Population

The LD adolescent, like his peers, is in a period of rapid physiological change and emotional adjustment. As he struggles to establish his independence from family ties, he looks to his peer group for role models and acceptance. His interests are concentrated more on the opposite sex, cars, and rock music than on academics.

Yet underneath these surface manifestations are underlying concerns regarding his identity as an adult and future vocational goals.

The LD student faces the period of adolescence with even more conflict than his non-handicapped peers. Because of his academic failure he has been criticized by teachers as being "lazy" and ridiculed by classmates as being "dumb". Parents have cajoled him to "try harder". Being bright enough to realize his inadequacies, he feels the pressure from all sides. As a result of this frustration, he may compensate for his failure by being disruptive or playing the class clown. At the opposite extreme the LD student may demonstrate his resistance by passive withdrawal.

The classroom teacher finds the LD adolescent difficult because he is often disorganized. He may fail to remember homework assignments or be unable to keep track of his books. He is frequently unable to copy written work from the board and may not be able to take notes in class. His short attention span and distractibility may result in disruptiveness or lack of attention. He may often be unable to read the required assignments in the text. Even when he appears to have mastered content, he may be unable to express it in written fashion on a test.

Many of the needs of the LD adolescent can be met within the regular classroom by making minor program modifications, such as:

1. Scheduling the student into courses where he has the most likelihood of success based on his learning style.
2. Presenting material in small sequential steps.
3. Reinforcing basic concepts with supplementary materials.
4. Arranging seating to minimize distractions.
5. Providing a course syllabus to overcome problems of disorganization.
6. Furnishing written records of homework assignments.
7. Providing a written copy of work put on the board to reduce copying errors and excessive time required by this task.
8. Permitting tape recording of lectures to allow student to keep pace with the class.
9. Segmenting learning experiences into shorter time blocs to accommodate the student's short attention span.
10. Utilizing pre-recorded textbooks in lieu of reading assignments.
11. Arranging for the student to take tests orally rather than in written form.
12. Removing time restrictions from tests or administering tests in two sessions.
13. Substituting oral reports, graphic displays or other projects for written reports.
14. Replacing selected reading assignments with audio-visual presentations.
15. Contracting with the student for a grade based on fulfilling mutually agreed upon course requirements.

16. Arranging for peer tutoring.
17. Providing positive feedback consistently and frequently.
18. Recognizing and utilizing special talents or areas of strength to promote learning.
19. Allowing the student to monitor his daily progress through the use of charts or graphs.
20. Communicating frequently with the LD resource teacher regarding the student's progress.
21. Reducing the LD student's load to four or even three credits per year, and scheduling a study hall in addition to LD resource services. (The LD student is eligible for services until age 21 if necessary to complete high school; for some students this may be a viable alternative.)

Remediation of specific deficit skill areas is the major need of the LD adolescent. Most secondary teachers who are content specialists cannot be expected to provide basic remediation in core areas such as language arts and mathematics. The LD teacher has been trained in the area of diagnostic/prescriptive teaching and use of specialized instructional materials and techniques and therefore can better meet these needs.

Typically the LD student will have severe deficits in the areas of language arts or mathematics. Some LD students will experience difficulty in both areas. Remedial teaching in the area of language arts will focus on improving word attack skills, reading comprehension, spelling, oral and written expression. The LD adolescent may need help with short vowel sounds, blends, or word endings. Another LD student may have

adequate decoding skills, but be unable to obtain meaning from what he has read. LD students with specific language disabilities may be unable to express their thoughts in written form and require help with writing complete sentences or paragraphs. In the area of mathematics the LD student may never have mastered basic computations or have difficulty with fractions, decimals, measurement, or time.

Another critical need of the LD adolescent is for survival skills which will enable him to function adequately in the regular classroom.

While program modifications may help the LD student to accommodate to the regular classroom, certain specific compensatory skills must be taught. The LD student needs to learn how to study efficiently, which may be accomplished by teaching him how to take notes, how to outline, find topic sentences or study for a test. He may require direct help in organizing materials, setting timelines for completing assignments and allocating sufficient study time to meet course requirements.

The LD adolescent's need for success experiences is far greater than that of his non-handicapped peers. After years of failure he may need to be convinced that he can learn. LD adolescents often express fears that they may be retarded. Others have lost any desire to try to learn. The job of motivating the LD student requires the LD teacher to provide tasks on his level where he can quickly experience success and challenging materials which will maintain his interest. Constant reinforcement and rewarding desired performance or successive approximations is a task shared by all teachers.

As the LD student begins to master basic skills positive changes will be seen in his self-concept as evidenced by better class attendance and increased motivation. While counseling may be helpful to the LD student, the most rapid and long lasting changes in self-concept will be brought about by good remedial teaching which provides him with academic success.

The LD student may be ill prepared to face the demands of adolescence because of his lack of socialization skills. He may have difficulty establishing appropriate relations with members of the opposite sex because he has never mastered appropriate interactions with peers. Direct counseling may be necessary to help the LD adolescent learn social interaction skills.

The LD adolescent needs guidance in terms of career awareness and future vocational goals. Some LD students will want to attend college and need encouragement and direction along those lines. For others graduation from high school will lead directly into a career. Helping the LD student to establish realistic goals and providing him with the necessary survival skills for further education or the world of work is an important aspect of the LD program. He may need extra preparation for taking college entrance examinations or may need to learn to read classified ads, fill out job application forms or keep a checkbook accurately. Differentiation of long term vocational objectives should take place as early in the high school program as possible to allow time for teaching compensatory strategies.

III. Program Eligibility

Each student suspected of having a learning disability should be referred to the Pupil Services Team by the local school's Child Study Team. Upon completion of medical, sociological, psychological, and educational evaluations the Eligibility Committee will meet to determine whether the student is eligible for services as learning disabled. The criteria upon which the committee makes its decision are as follows:

1. Each student must have average or above intelligence as measured by an individually administered intelligence test.
2. When interference with school progress is the result of mental retardation, sensory deficit, emotional disturbance, or cultural or economic disadvantage, then the child cannot be identified as learning disabled.
3. Each student must evidence a severe discrepancy between achievement and potential in one or more of the following areas: oral expression, written expression, listening comprehension, basic reading skill, reading comprehension, mathematics calculation or mathematics reasoning.
4. In addition each student must exhibit at least three of the following factors:
   a. significant discrepancy between verbal and performance scores on the Weschler scales,
   b. significant disparity among sub-test scale scores,

c. presence of expressive or receptive language impairment,

d. difficulty in interpreting information presented visually,

e. difficulty in interpreting information presented auditorially,

f. evidence of reversals in letter or number production,

g. history of delayed language development,

h. evidence of a perceptual motor disability as manifested in problems of balance, rhythm, laterality, motor incoordination,

i. deficit in memory skills,

j. prior medical diagnosis of hyperactivity.

IV. Period of Enrollment

The period of time an LD student will be enrolled in the program is not the same for each student, but will be determined by individual student progress as measured by periodic evaluations. Some students may require special help for just one semester, while others may continue to need help throughout their high school career. So that the student will earn at least ½ credit, the stay in the LD program will be a minimum one semester. Furthermore, changes in placement will occur only at semesters, and not in mid-school year.

The purpose of the LD resource program is to remediate basic skills to the point where the student has achieved a level of functional literacy and should be able to succeed in regular classes. Parents or teacher may request reassignment from the LD resource program by contacting the Special Education Supervisor in writing. Upon receipt of such notice, the Special Education Supervisor will notify the LD teacher to collect post-test data which supports the recommendation for reassignment. Any program change will be made only after the Eligibility Committee has reviewed written progress reports and test data provided by the LD teacher.

V. Personnel Roles

A. Learning Disabilities Resource Teacher

The LD resource teacher will assume a variety of roles in order to meet the needs of the LD student. The primary function of the resource teacher is to direct instruction for the student in the areas of basic skills and survival strategies. As such, most of the day will be spent working directly with the student in the resource room. An individualized educational plan will be developed for each student based on evaluation data and will include long term goals and short term objectives. The LD teacher will use this IEP as a basis for individualizing instruction and determining curriculum content for each LD student. The LD teacher will work with the student on a one-to-one basis, in small groups and on self-directed activities.

Utilizing pre-tests, criterion-referenced tests and informal instrument, the LD teacher will identify target areas for instruction. Based on the information obtained the LD teacher will select materials and techniques to be used with the student. Post-testing will be used to determine mastery of one concept before presenting the next. This sequence of test-teach-test will be used throughout the student's program in the resource room providing continuous monitoring of student progress. The LD teacher will give grades for work done in the resource room and will furnish narrative progress reports at regular reporting intervals.

A secondary function of the LD teacher is that of consulting with the regular classroom teacher. Hopefully the faculty will view the LD teacher as a resource to them - a person who will assist them with

strategies and materials for helping the LD student in the regular classroom. The LD teacher may provide assistance with identifying a student's problem areas, observe the student's performance in the regular classroom, suggest specific materials or teaching techniques for the teacher to use. The LD teacher may consult with the regular classroom teacher about program modifications, materials adaptations, and coordination of activities of the resource program with the objectives of the regular class. Upon request the LD teacher may work directly with the LD student in the regular classroom or do demonstration teaching. The LD teacher will communicate regularly with the classroom teacher regarding the LD student's progress.

Another role of the LD teacher is working with the guidance counselor in a team approach to meeting the LD student's social adjustment and vocational needs. The LD teacher may be able to pinpoint areas in which the student might need individual or group counseling. The LD teacher may administer interest inventories or prevocational tests which would aid the counselor in determining whether the LD student will be college bound or career bound after completion of high school. Making this distinction between long range career goals will aid the LD teacher in planning appropriate instructional objectives and the counselor in directing the student's course of study. Close cooperation between the LD teacher and guidance counselor will result in a more effective overall program for the LD student.

Because of the LD student's unique learning characteristics he requires various adjustments in many everyday situations. Provisions for taking college boards or driver's examinations orally may be made

for identified LD students. Textbooks on tape and listening devices may be furnished by the Virginia Commission for the Visually Handicapped. However, in order to obtain these special exceptions or materials someone must identify the student's needs and have knowledge of existing resources. The LD teacher is equipped to serve in this advocacy capacity for the LD student.

It is of utmost importance to maintain ongoing communication between the school and the parents of the LD student. The LD teacher is a logical liaison person to interpret diagnostic results, explain the implications of specific learning disabilities in lay language, describe program goals and student progress to parents. Assisting parents in accepting their child's handicap and providing techniques for supporting the student at home are other functions of the LD teacher.

B. Regular Classroom Teacher

Even though the LD student will be receiving support services in the resource room, the major portion of his day will be spent with the regular classroom teachers. The role of the regular classroom teacher is to provide direct instruction in content areas for which the student will be receiving course credit. The regular classroom teacher will work with the LD resource teacher to develop an IEP for the LD student. Certain program modifications to facilitate instruction and kinds of a assistance available from the LD teacher have been discussed previously. To insure the LD student's success in regular courses communication between the classroom teacher and the LD teacher is extremely important to maintain program consistency for the LD student.

C. Guidance Counselor

The guidance counselor's role with the LD student is of particular importance because this student will require special scheduling, direction in terms of vocational goals and perhaps individual counseling. The counselor is in a unique position to be able to help the student understand both his limitations and his abilities. The counselor may provide opportunities to stimulate his investigation of vocational goals and aid in the selection of appropriate courses of study.

D. Principal

The principal can play a vital role in the success of the LD resource program by fostering acceptance of the LD student, understanding his particular learning problems and promoting acceptance of the program with the faculty. As with any other in-house program the principal will have responsibility for supervision and evaluation of the teacher. The principal will act as chairman of the IEP conference with the LD teacher, regular classroom teacher, the child, and his parents. The principal is encouraged to be a frequent visitor to the LD resource room.

VI. Curriculum

Curriculum for the LD adolescent in the resource program will be individualized to meet his unique needs as outlined in the IEP. Entry level skills will be assessed by diagnostic pre-tests and will determine the student's placement within the sequence of skills in the LD curriculum. Major curricular areas are as follows:

I. Language Arts
   - A. Reading
     1. Word attack
     2. Comprehension
   - B. Oral expression
   - C. Written expression
   - D. Spelling

II. Mathematics
   - A. Computation
   - B. Reasoning

III. Survival Skills
   - A. Study skills
   - B. Compensatory skills
   - C. Job-related skills

A detailed list of curricular objectives may be found in the appendix.

VII. Materials

The LD adolescent has experienced years of frustration from being exposed to instructional materials that were not appropriate for his achievement level. Many LD students reject anything which resembles a textbook. Therefore, it is extremely important to provide an array of highly motivating instructional materials in the LD resource room. Most special education materials have been developed for the elementary-level student and are not appropriate for the adolescent.

Taken from the fields of adult education, ESL and remedial reading, the materials selected for the secondary LD program feature mature subject matter and format. Emphasis is on high interest-low vocabulary reading levels, practical application and vocational orientation. A list of these materials is included in the appendix.

VIII. Evaluation

As referenced earlier the diagnostic/prescriptive approach to teaching learning disabled students is a cyclical process of test-teach-test. Therefore, monitoring of student progress is a continuous process in the LD program. Each student upon entrance to the LD program will be given the following pre-tests: a criterion-referenced reading and math test, a pre-vocational skills survey and a self-concept inventory. Daily and/or weekly student evaluation will be done through the administration of informal teacher-made tests, mastery probes or check-lists. Each student's progress will be measured by the achievement of short time objectives listed on the IEP for that grading period. Student progress will be reported in narrative form at the end of each grading period.

Each student's progress must be reviewed annually. Results of post-testing with criterion-referenced reading and math tests and self-concept inventories will be recorded in narrative form on the annual progress report. The extent to which annual goals have been met will be delineated in the annual IEP conference.

The effectiveness of the LD resource program will be assessed using the Discrepancy Evaluation Model. Using this design the program outcomes are measured against program objectives to determine whether objectives have been met or a discrepancy exists. If a discrepancy is found the design will show what needs to be changed to meet the original objectives.

The objectives upon which the LD resource program will be evaluated are:

1. LD students will demonstrate marked academic gain in the areas of language arts or mathematics as shown by post-test data.

2. LD students will demonstrate significant positive change in self-concept.
3. LD students will demonstrate acquired knowledge of survival skills by improvement in taking notes, studying for tests, organizing materials and taking tests.
4. Regular classroom teachers will evidence willingness to make minor program modifications.
5. Regular classroom teachers will actively seek assistance from the LD resource teacher.
6. Regular classroom teachers will refer students as possible candidates for the LD resource program.
7. Students will refer themselves as possible candidates for the LD resource program.

IX. The Role of the Local Special Education Advisory Committee

The Advisory Committee is appointed by the School Board. Membership is limited to persons not employed by the school division and representative of local civic organizations, business and industry, public agencies, parents of handicapped children and handicapped persons. The Advisory Committee assists in the formulation of long-range program goals to be included in the Six Year Plan for Special Education. The committee assists the Supervisor of Special Education in developing priorities to meet the needs of handicapped students, such as additional teaching staff, equipment and materials or identification. The committee may submit recommendations regarding the LD program to the Superintendent. The committee members assist in making the community aware of program offerings and needs.

Appendices

Appendix A . . . . . Curriculum

Appendix B . . . . . Materials

Appendix A

Curriculum for Learning Disabilities Resource Program

I. Language Arts

A. Reading

1. Word Attack Skills

a. recognize initial and final consonant sounds

b. identify consonant blends and digraphs

c. recognize plural formations and other endings

d. identify long and short vowel sounds

e. identify vowel digraphs and other vowel combinations

f. apply generalization for final silent e

g. analyze compound words

h. recognize contractions

i. identify hard and soft c and g sounds

j. apply rules of syllabication

k. distinguish suffixes, prefixes, and root words

l. identify synonyms, antonyms, and homonyms

2. Comprehension

a. sequence events in a story

b. retell story in students' own words

c. answer questions about a story

d. abstract main idea from a paragraph

e. draw inferences from a paragraph

f. identify mood of a paragraph

g. identify cause and effect in a paragraph

h. use evidence to support, confirm, or revise predictions about story endings

i. summarize a story

j. discriminate between fact and fiction

B. Oral Expression

1. speak in complete sentences
2. express thoughts clearly
3. use correct syntax and grammar
4. speak fluently
5. give and follow directions
6. use questioning techniques for obtaining specific information
7. verbalize appropriately in formal and informal situations

C. Written Expression

1. Handwriting
   a. write or print legibly
2. Construction
   a. use parts of speech correctly
   b. write in complete sentences
   c. write a topic sentence
   d. write a short paragraph
3. Mechanics
   a. use correct capitalization and punctuation
   b. use correct verb tense, plurals and possessives
   c. use correct placement of modifiers
4. Composition
   a. utilize outline techniques
   b. write personal and business letters
   c. write essays, theme and research reports

D. Spelling

1. write alphabet letters
2. associate letter sound with visual form of letter

3. recall the sequence of letters in a word
4. maintain a visual image of words
5. know consonant sounds
6. know vowel sounds
7. spell phonetically regular words
8. spell irregular words

II. Mathematics

1. Computation
   a. recognize number symbols
   b. count by ones
   c. count by tens
   d. count by fives
   e. count by twos
   f. count by threes
   g. illustrate concepts of equal, greater than, less than
   h. identify place value up to millions
   i. operations - addition
      1. add single-digit numbers
      2. add two-digit plus one-digit without regrouping
      3. add two-digit plus one-digit with regrouping
      4. add two two-digit numbers without regrouping
      5. add two two-digit numbers with regrouping
      6. add two three-digit numbers without regrouping
      7. add two three-digit numbers with regrouping

8. add columns of numbers without regrouping
9. add columns of numbers with regrouping
10. add decimals
11. add fractions
12. add mixed numbers

j. operations - subtraction

1. name subtraction facts through 18
2. subtract one-digit from two-digit number without regrouping
3. subtract one-digit from two-digit number with regrouping
4. subtract two-digit from two-digit number without regrouping
5. subtract two-digit from two-digit number with regrouping
6. subtract two-digit from three-digit number without regrouping
7. subtract two-digit from three-digit number with regrouping
8. subtract in tens place two-digit from three-digit number with regrouping
9. subtract in hundreds' and tens' place three or more digit from three or more digit numbers without regrouping
10. subtract three or more from three or more digit number with regrouping
11. subtract when there are zeroes in the minuend
12. subtract decimals
13. subtract fractions
14. subtract mixed numbers

k. operations - multiplications

1. recite multiplication facts 0 - 9
2. multiply two-digit by one-digit number without regrouping
3. multiply two-digit by one-digit number with regrouping
4. multiply three or more digit by one-digit number without regrouping
5. multiply three or more digit by one-digit number with regrouping
6. multiply three or more digit number with zeroes in the ones or tens place by a one-digit number with or without regrouping
7. multiply two-digit by two-digit number without regrouping
8. multiply two-digit by two-digit number with regrouping
9. multiply three or more digit by two-digit number without regrouping
10. multiply three or more digit by two-digit number with regrouping
11. multiply three or more digit by two-digit number with or without regrouping, with zeroes in the multiplicand
12. multiply three or more digit by two-digit number with or without regrouping, with zeroes in the multiplicand and/or the multiplier
13. multiply three or more digit by three or more digit number without regrouping
14. multiply three or more digit by three or more digit number with regrouping

15. multiply three or more digit by three or more digit number with or without regrouping, with zeroes in the multiplicand and/or multiplier
16. multiply decimals
17. multiply fractions
18. multiply mixed numbers

1. operations - division
   1. recite division facts 0 - 9
   2. divide two-digit by one-digit number without a remainder
   3. divide three-digit by one-digit number with a remainder
   4. divide four-digit by one-digit number with a remainder
   5. divide four-digit by two-digit number with a remainder
   6. divide decimals
   7. divide fractions
   8. divide mixed numbers

2. Reasoning
   a. Word Problems
      1. solve oral or written word problems involving the four basic operations
   b. Money
      1. identify pennies, nickels, dimes, quarters, and half-dollars
      2. tell value of pennies, nickels, dimes, quarters, and half-dollars
      3. identify and give value of $1, $5, $10, $20, and $50 bills

4. name $ and ¢ signs
5. count change in coins, up to $1.00
6. count change in coins and bills, up to $20.00
7. write amounts of money, up through $1,000.00
8. read and write decimal notation for money

c. Time

1. recite basic time facts, as follows:

   60 seconds = 1 minute

   60 minutes = 1 hour

   24 hours = 1 day

   7 days = 1 week

   52 weeks = 1 year

   365 days = 1 year (366 for leap year)

   12 months = 1 year

2. tell time to the nearest hour
3. tell time to the nearest half-hour
4. tell time to the nearest quarter-hour
5. tell time to the nearest minute
6. recognize different expressions of the same time of day (e.g. 2:45, 15 minutes before 3, or quarter 'till 3)
7. compute elapsed time
8. use calendar to identify days of week
9. use calendar to indicate on which day of the week a specific date will fall
10. use calendar to identify months of year
11. use calendar to indicate on which date a specific day will fall

d. Measurement

1. recite linear measurement facts, such as:

   12 inches = 1 foot

   3 feet = 1 yard

   36 inches = 1 yard

   5,280 feet = 1 mile

2. use ruler to measure length to the nearest inch, ½ inch, ¼ inch, 1/8, and 1/16 inch

3. recite liquid and dry measurement equivalencies such as:

   2 cups = 1 pint

   2 pints = 1 quart

   4 quarts = 1 gallon

   16 ounces = 1 pound

   2,000 pounds = 1 ton

4. identify metric equivalents of units of measure

5. identify points of reference in temperature, such as

   0° F = freezing point

   68° F to 72° F = room temperature

   212° F = boiling point

6. read temperature on Celsius and Fahrenheit thermometers

e. Charts and Graphs

1. use number line

2. interpret various kinds of graphs, such as

   pictographs

   bar graphs

line graphs

circle graphs

tables

charts

3. construct various kinds of graphs

4. graph given information

f. Geometry

1. identify various shapes, such as:

square rectangle

circle triangle

2. find perimeter of rectangle or square

3. find area of rectangle or square

4. identify a given pair of lines as parallel, perpindicular, or intersecting

g. Consumer Math

1. compute weekly total of working hours

2. recognize vocabulary related to working:

hourly rate

earnings

gross pay

net pay

deductions

3. compute gross pay

4. compute net pay, given deductions

5. compute overtime pay

6. construct a budget
7. list services provided by a bank
8. list and complete parts of a check
9. complete a checking account deposit slip
10. list advantages and disadvantages of loans and installment loan purchases
11. state Virginia sales tax rate
12. use sales tax chart to compute the tax on a "purchase"
13. compute sales tax on a "purchase"
14. transfer knowledge of whole numbers, decimals, percent, and fractions to solve practical problems such as:
    - owning and operating a car
    - planning trips
    - insurance
    - investments

III. Survival Skills

A. Study Habits

1. Develop an awareness of the necessity for studying
2. Establish a specific time of day and location for studying
3. Record assignments in writing
4. Organize assignments by due dates
5. Allot sufficient time to study depending upon the number of assignments
6. Develop tactics for approaching the reading task
   a. Determine the type of materials to be read
   b. Allocate varying amounts of time depending on the difficulty level of the material

c. Scan for general meaning before reading

d. Utilize table of contents, introduction, chapter titles, paragraph headings as clues to content

e. Formulate questions to be answered

7. Apply techniques of scanning or skimming

8. Read to obtain factual information

9. Locate the main idea

10. Read to evaluate or analyze

11. Watch for inferences or propaganda

12. Master mechanics of outlining

13. Utilize outling techniques for notetaking

a. Select major topics

b. Organize subordinate facts

14. Develop notetaking skills

a. Organize material

b. Select main idea

c. Paraphrase material

15. Learn how to study for tests

a. Determine extent of material to be covered

b. Practice answering different types of questions

c. Review technical vocabulary or concepts

d. Select and organize material for essay questions

16. Locate information - a dictionary, glossary and thesaurus

17. Utilize the card catalogue, vertical file, reference section and indexes to periodicals to locate information

18. Develop research techniques for report writing
    a. Select and limit a topic
    b. Obtain references using library sources
    c. Collect materials from other sources - businesses, interviews, etc.
    d. Take notes and list citations
    e. Organize content
    f. Determine format required for footnotes and bibliography

B. Compensatory Skills
    1. Utilize preferred learning style
    2. Refine listening skills
    3. Ask questions freely
    4. Avoid selecting or volunteering for tasks which are beyond level of skills
    5. Determine individual teacher's expectations and preferences
    6. Color code material to avoid reversals or directionality problems
    7. Use revisualization skills as a memory aid
    8. Use manipulatives to represent abstract concepts
    9. Use marker to aid visual tracking
    10. Summarize main idea from reading selection or lectures
    11. Proofread written assignments
    12. Tape record lectures
    13. Tape record reports or assignments
    14. Type written assignments if handwriting is not legible
    15. Use a calculator for math computations

16. Interview people in lieu of using printed sources
17. Review and reread material to promote overlearning
18. Utilize audio visual materials to supplant or supplement printed material

C. Job Survival Skills

1. Develop awareness of wide range of career opportunities
2. Select occupational choice appropriate for abilities and aptitudes
3. Search for a job using newspaper want ads, employment opportunity bulletins
4. Set up appointments for job interviews by phone
5. Dress appropriately for an interview
6. Demonstrate good grooming and hygiene
7. Fill out job application form completely and accurately
8. Interview for a job using simulation techniques
9. Demonstrate in class those qualities necessary to hold a job:
   a. Be punctual
   b. Bring necessary material and equipment
   c. Settle down to work quickly
   d. Concentrate on task
   e. Follow task through to completion
   f. Follow directions
   g. Accept supervision
   h. Cooperate with co-workers
10. Define the terms gross pay, net pay, FICA, payroll deductions

11. Define and list types of fringe benefits
12. Calculate weekly wages given hourly rate.
13. Prepare budget given income, family size, and obligations
14. Demonstrate understanding of installment buying by:
    a. Know where to obtain credit
    b. Figure total cost given interest rate and duration of payments
15. Complete deposit slip
16. Balance a checkbook and reconcile a bank statement
17. Complete 1040 and state tax forms

Appendix B

Language Arts

Name of Material	Publisher	Levels	Contents
Adult Reading Series	Steck-Vaughn, Co., 1975	Reading Level: 1-4 Grade Level: Jr./ Sr. High School	Reader workbooks, teacher's manual
Checkered Flag Series	Field Enterprises	Reading Level: 2nd grade Grade Level: Jr. High School	Four hardback books containing stories and exercises
Dictionary Skills	Curriculum Associates, Inc.	Grade Level: Jr. High School	Student Skill Books and Teacher's Guide provide self-directing lessions to improve dictionary skills
Dr. Spello (2nd Ed.)	McGraw-Hill, Webster Division, 1968	Grade Level: 4-9	Workbook dealing with corrective reading and spelling skills
Fearon Racing Series	Fearon-Pitman Publishers	Reading Level: 4th grade Grade Level: 5-12	Five books covering different kinds of racing. Teacher's Guide included
Pacemaker Classics	Fearon-Pitman Publishers	Reading Level: 2-3 Grade Level: 5-12	Eight literature "classics" in low-vocabulary format, with Teacher's Guide

Name of Material	Publisher	Levels	Contents
Point 31	Reader's Digest, 1975	Adolescents Reading Level 1.5 - 4.9	Reader magazines, activity books, evaluation program, teacher's manual
Reluctant Readers Library	Scholastic Book Service	Reading Level: 4-9 Grade Level: Jr./ Sr. High School	50 paperbacks of interest to adolescents, Teacher's Guide included
Scholastic Action	Scholastic Book Services, 1970	Reading Level: 2-4 Grade Level: 7-12	Skill Books, Teacher's Guide, Records, Posters
Specific Skills Series	Barnell Loft, Ltd.	Levels D-I Crade : Jr./ Sr. High School	48 booklets, one copy each of the eight skill booklets on each of levels 4-9
Troubleshooter	Houghton-Mifflin Co. 1975	Grade Level 9-12	Paperbound books, pre- and post-tests
Useful Words I	Curriculum Associates, Inc.	Grade Level: Jr./ Sr. High School	Spirit Master Skillbooks with 40 lessons, and Teacher's Guide
Using English and Everyday English	Steck-Vaughn Company	Reading Level: 3-5 Grade Level: Jr./ Sr. High School	Workbooks provide review and practice in grammar and punctuation

Name of Material	Publisher	Levels	Contents
Your Daily Paper	New Readers Press 1977	Grade Level: Jr./ Sr. High School	Workbook developing reading and comprehension skills using the newspaper

Mathematics

Name of Material	Publisher	Levels	Contents
Holt School Mathematics	Holt, Rinehart, & Winston, 1970	Levels 1-8 Jr./Sr. High School	8 levels - each with 6 units covering basic math skills from sets and basic operations through geometry
Math for Banking	Mafex Associates	Jr./Sr. High	Student Text and Teacher's Guide. Lessons cover all aspects of banking from using a checking account to arranging a loan.
Math for the Consumer	Mafex Associates	Jr./Sr. High	Student Test, and Teacher's Guide. Lessons cover checking accounts, payroll time cards, money, time, and measurement.
Math for Employment	Mafex Associates	Jr./Sr. High	Student Text and Teacher's Guide. Lessons cover basic arithmetic, use of money, and working at specific trades.
Math for the Worker	Mafex Associates	Jr./Sr. High	Student Text and Teacher's Guide. Lessons cover working in a gas station and restaurant, managing money, and sales tax.

Name of Material	Publisher	Levels	Contents
Money Makes Sense	Fearon-Pitman Publishers, 1972	Reading Level: 2nd Grade Grade Level: 3-9	Workbook dealing with history of money, coin recognition coin values, uses of money
Moving Up In Money	Developmental Learning Materials	Grade Level: Jr. High School	94 activity cards dealing with money, counting, and making change
Moving Up In Story Problems	Development 1 Learning Materials, 1978	Grade Level: Jr. High School	Card program applying math to everyday situations. Motivating format.
Moving Up In Time	Developmental Learning Materials	Grade Level: Jr. High School	180 Cards dealing with telling time to five-minute intervals
Spectrum Math	Laidlaw Brothers	Grade Level: 1-6	Student workbook and Teacher's Guide. Lessons offer review of basic math operations
Step by Step Arithmetic Kit B	Continental Press	Grade Level: 4-6	Ditto masters covering math operations, time, money, measurement
Useful Arithmetic	Frank Richards Publishing Co., 1975	Grade Level: 9-12	Applied arithmetic in textbook format. Useful in teaching everyday math.

Name of Material	Publisher	Levels	Contents
Using Dollars and Sense	Fearon-Pitman Publishers, 1973	Reading Level: 2nd grade Grade Level: Jr. High School	Workbook dealing with value of money, making change, and operations involving money.
Using Money Series	Frank Richards Publishing Co. 1973	Reading Level: 1-4 Grade Level: 7-12	Workbooks dealing with practical finances.

Career Education

Name of Material	Publisher	Levels	Content
Building Safe Driving Skills	Fearon-Pitman Publishers	Reading Level: 3rd grade Grade Level: Sr. High School	Student Test, Workbook, and Teacher's Guide
The Job Box	Fearon-Pitman Publishers	Reading Level: 2nd Grade Grade Level: Jr./ Sr. High	Descriptions of 70 vocations in illustrated booklets provide full information for the student, includes teacher's guide.
Vocational Entry Skills for Secondary LD Students	Academic Therapy Publications	Jr./Sr. High School	Student Workbook and Teacher's Guide. Lessons cover vocational academics, job preparation, and job skills training.

MISCELLANEOUS

Name of Material	Publisher	Levels	Contents
Cues and Signals	Ann Anbor Publishers 1971	Levels I - IV Jr./Sr. High School	Student Workbooks, can be used with special re-usable pen to track letters for accuracy.
Developing the Listening Skills	Educational Activities, Inc. 1974	Jr./Sr. High School	Workbook containing 50 lessons to develop listening skills, lessons range from discriminating consonant sounds to understanding sentence syntax.
Elaborative Thinking Set	Curriculum Associates, Inc.	Jr. High School	30 activity cards, 2 response spirit masters, 8 introductory cards, and teacher's guide, generate ideas for creative writing and oral expression.
Thought Tracking	Ann Arbor Publishers 1976	Levels I - IV Jr./Sr. High School	Student Workbooks, can be used with special re-usable pen to track phrases through questions and answers.
Typing Keys for Remediation of Reading & Spelling	Academic Therapy Publications	Jr./Sr. High School	Teacher's Manual to be used to teach students reading and spelling using the typewrite

Pupil Assessment

Name of Test	Publisher	Levels	Contents
Individualized Criterion Referenced Testing (Reading & Math)	Educational Progress Co.	Grade Level 1-8	Full range of reading and math skills.
Wide Range Achievement Test	Guidance Associates	Ages 12 and Over	Spelling, Arithmetic, and Reading
Peabody Individual Achievement Test	American Guidance Service	Grade Level K-12	Mathematics, Reading Recognition, Reading Comprehension, Spelling, General Information subtests in a motor-free format.
Woodcock Reading Mastery Tests	American Guidance Service	Grade Level 1.0 - 12.9	Letter Identification, Word Identification, Word Attack, Word Comprehension, Passage Comprehension
Test of Written Spelling	Academic Therapy Publications	Grade Level 1-9	Phonetically predictable words, phonetically unpredictable words
KeyMath Diagnostic Arithmetic	American Guidance Service	Grade Level K-9	Mathmatical content, operations, and applications
Detroit Tests of learning Aptitude	Bobbs-Merril Co.	Age Level 3 years - Adult	Specific information about mental traits, motor speed and precision, social adjustment, and learning abilities

Name of Test	Publisher	Levels	Contents
Social and Prevocational Information Battery	CTB/McGraw-Hill	Grade Level Jr./Sr. High School	Purchasing Habits, Budgeting, Banking, Job Related Behavior and Job Search Skills, Health Care, Home Management, Hygiene and Grooming, and Functional Signs in a non-reading format.

REFERENCES

Alley G. R. Grouping secondary learning disabled students. Academic Therapy, 1977, 13:37-45.

Augusta County Public Schools. Curriculum Guide for Junior and Senior High Educable Classes. Fishersville, Va: Augusta County Schools, 1976.

Bingham, G. Career attitudes among boys with and without specific learning disabilities. Exceptional Children, 1978, 44:341-342.

Brolin, D. E. Vocational Preparation of Retarded Citizens. Columbus, Ohio: Charles E. Merrill Publishing Co., 1976.

Bruininks, V. L. Actual and perceived peer status of learning disabled students in mainstream programs. Journal of Special Education, 1978. 12:51-58.

Cahn, L.D. & Nolan, C.E. The learning disabled adolescent - creating a climate for learning. NASSP Bulletin, 1976, 60:16-20.

Cegelka, P.T. & Phillips, M.W. Individualized education programming at the secondary level. Teaching Exceptional Children, 1978, 10:84-87.

Chalfant, J. C. & King, F.S. An approach to operationalizing the definition of learning disabilities. Journal of Learning Disabilities, 1976, 9:228-243.

Dagbjartsson, A., Robinson, C. & Dyment, P.G. Profile of children with learning disabilities. Cleveland Clinic Quarterly, 1976, 43:7-10.

D'Alonzo, B. J. & Miller, S.R. A management model for learning disabled adolescents. Teaching Exceptional Children, 1977, 9:58-60.

Danielson, L.C. & Bauer, J.N. Formula-based classification of learning disabled children: an examination of issues. Journal of Learning Disabilities, 1978, 11:163-176.

Department of Education, Division of Elementary Education. Basic Learning Skills, Grades K-6. Richmond, Va. Commonwealth of Virginia, 1977.

DeWitt, F. B. Tear off the label: the older student and SLD. Academic Therapy, 1977, 13-69-78

Fairfax County Public Schools, Learning disabilities program, program of studies: section c. Fairfax, Virginia.

Glass, J. C. & Hoffman, L.M. Learning disabilities in adults. Community College Review, 1976, 4:27-35.

Goldenberg, D.S. Noit-a-cude; high school for the learning disabled. Academic Therapy, 1976, 11:313-319.

Goodman, L. & Mann, L. Learning Disabilities in the Secondary School. New York: Grune & Stratton, Inc., 1976.

Gordon, S. The "brain-injured" high school student. Academic Therapy, 1968-69, 4:87-91.

Grill, J. J. School programming for adolescents. Academic Therapy, 1978, 13:389-399.

Grill, J. J. Identification of learning disabled adolescents. Academic Therapy, 1977, 13:23-28.

Grossman, R. P. LD and the problem of scientific definitions. Journal of Learning Disabilities, 1978, 11:120-3.

Hammill, D. D. Defining "learning disabilities" for programatic purposes. Academic Therapy, 1976, 12:29-37.

Hammill, D. D. & Bartel, N.R. Teaching Children With Learning and Behavior Problems. Boston: Allyn and Bacon, Inc., 1975.

Lehtinen-Rogan, L. E. How do we teach him? in Readings in learning disabilities. Guillford, Conn.: Special Learning Corp, 1978.

Lerner, J. W. Children with Learning Disabilities, 2nd ed. Boston: Houghton-Mifflin Co., 1976.

Lerner, J. W., Evans, M.A., & Myers, G. LD programs at the secondary level: a survey. Academic Therapy, 1977, 13:7-19.

Mann, L., Goodman, L., & Wiederholt, J.L. Teaching the Learning Disabled Adolescent. Boston: Houghton-Mifflin Co., 1978.

Marsh, G. E., Gearheart, C.K., & Gearheart, B.R. The Learning Disabled Adolescent. Saint Louis: C.V. Mosby Co., 1978.

Mauser, A. J. & Guerrieo, C.A. A curriculum development model for LD students. Academic Therapy, 1977, 13:63-68.

McDonnell, K. Bridging the achievement gap in negative learning adolescents. In J. Arena (ed.) The Child With Learning Disabilities: His Rights to Learn. Eighth Annual Conference Proceeding, A.C.L.D. San Rafael, CA: Academic Therapy Publications.

Minskoff, E. H. & Minskoff, J. G. A unified program of remedial and compensatory teaching for children with process learning disabilities. Journal of Learning Disabilities, 1976, 9:215-222.

Morrissey, P. A. & Semmel, M.I. Instructional models for the learning disabled. Theory Into Practice, 1975, 14:110-122.

Morse, D. Counseling the young adolescent with learning disabilities. The School Counselor, 1977, 25:8-16.

Ohio Department of Education, Division of Special Education, The Secondary LD student and prevocational preparation: a resource of program options. Worthington, Ohio: Ohio Department of Education.

Paroz, J. Siegenthaler, L.S. & Tatum, V.H. A model for a middle-school resource room. Journal of Learning Disabilities, 1977, 10:1-9.

Salvia, J. & Clark, J. Use of defecits to identify the learning disabled. Exceptional Children, 1973, 39:305-308.

Schoolfield, W. R. Limitations of the college entry LD model. Academic Therapy, 1978, 13:423-431.

Scranton, T.R. & Downs, M.L. Elementary and secondary learning disabilities programs in the U.S.: a survey. Journal of Learning Disabilities, 1975, 8:394-401.

Senf, G. M. A perspective on the definition of LD. Journal of Learning Disabilities, 1977, 10:537-539.

Senf, G.M. Implications of the final procedures for evaluating specific learning disabilities. Journal of Learning Disabilities, 1978, 11:124-126.

Sherry, M. & Franzen, M. Zapped by ZING. Teaching Exceptional Children, 1977, 9:46-47.

Shuman, R. B. Of course he can read - he's in high school: Journal of Reading, 1975, 19:36-42.

Sulzbacher, S. & Kenowitz, L. At last a definition of learning disabilities we can live with? Journal of Learning Disabilities, 1977, 10:8-10.

Vance. H. B. Trends in secondary curriculum development. Academic Therapy, 1977, 13:29-35.

Wallace, G. & Kauffman, J. M. Teaching children with learning problems. Columbus, Ohio: Charles E. Merrill Publishing Co. 1973.

Wallace, G. & McLaughlin, J.A. Learning Disabilities: concepts and characteristics. Columbus, Ohio: Charles E. Merrill Publishing Co., 1975.

Washburn, N.Y. Where to go in voc-ed for secondary LD students. Academic Therapy, 1975, 11:31-35.

Weiner, E. S. Transition to college for LD students. Academic Therapy, 1975-76, 11:199-203.

Wennberg, H. & Hare, B. A. Services for LD students in elementary and secondary schools. Academic Therapy, 1977, 13:57-62.

Weiderholt, J. L. & McNutt, G. Evaluating materials for handicapped adolescents. Journal of Learning Disabilities, 1977, 10:132-140

Wigg, E. H. & Semel, E.M. Productive language abilities in learning disabled adolescents. Journal of Learning Disabilities, 1975, 8:578-582.

Ysseldyke, J. E. & Bagnato, S.J. Assessment of exceptional students at the secondary level: a progmatic perspective. High School Journal, 1976, 59:282-289.